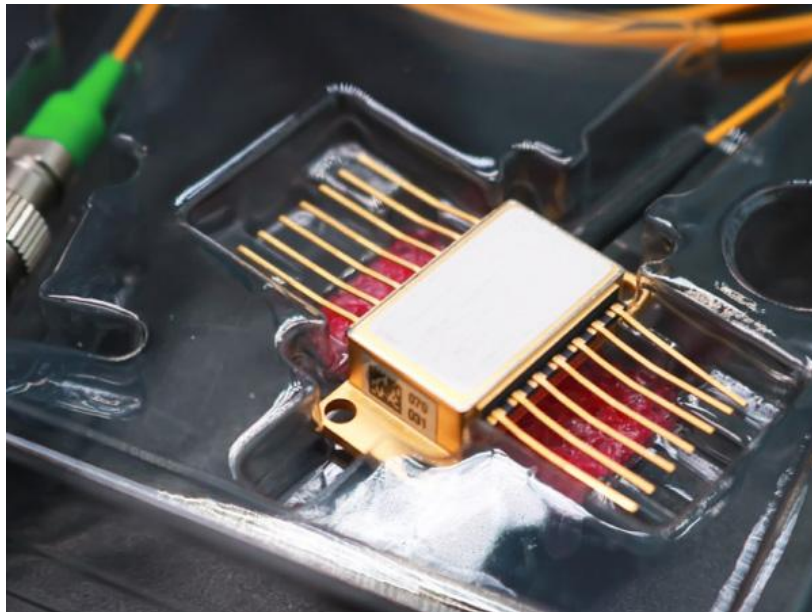


1400nm 15mW PM SLD Laser Diode



● Product Description

The 1400nm SLD is a broadband SLD operating in inherent superluminescent mode. Unlike traditional ASE-based SLDs, which produce narrower spectral bandwidths under higher drive currents, this superluminescent characteristic enables it to generate wider spectral bandwidths at higher drive currents. Its low coherence reduces Rayleigh backscattering noise. Combined with high power and broad spectral width, it mitigates photodetector noise, improving spatial resolution (for OCT) and measurement sensitivity (for sensors). This 1400nm SLD features a 14-pin



butterfly package and meets the requirements of Bellcore document GR-468-CORE.

● Product features

High-power SLD output; Polarization-maintaining fiber coupling; Broad spectral characteristics; High stability; Compact industrial design

● Part Number

MP-SLD-1400-15-A81-14BF-PA

● Application area

Optical Coherence Tomography | Fiber-optic sensing | Device testing |
Biological detection | Fiber-optic gyroscopes

● Core parameters

Center Wavelength	Output Power
1400 nm	15 mW

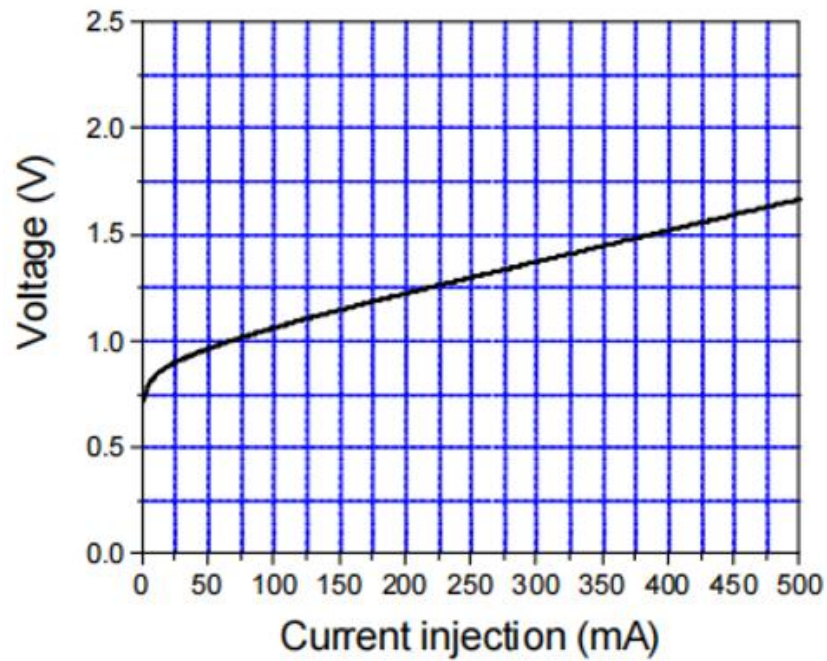
Max. value parameter

Absolute Max. value parameter

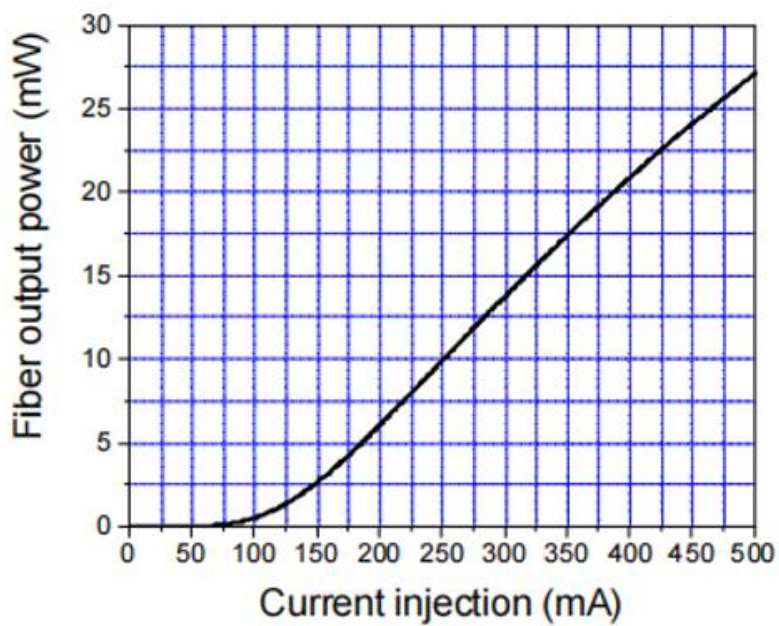
Parameters	symbol	conditions	Min.	Max.	unit
Reverse voltage	V_R	-	-	2	V
Forward current	I_F	-	-	550	mA
Forward voltage	V_F	I_{op}	-	2.8	V
Body temperature	T_c	I_{op}	-40	65	°C
SLED temperature	T_{SLED}	I_{op}	0	70	°C
TEC voltage	V_{TEC}	-	-	3.6	V
TEC current	I_{TEC}	-	-	2.6	A
Storage temperature	T_{stg}	Unbiased	-40	85	°C
Storage humidity	-	-	5	85	%RH
Electrostatic Diffusion (ESD).	V_{ESD}	Human body model	-	500	V
Lead welding temperature	S_{temp}	-	-	260	°C
Lead soldering time	S_{time}	-	-	10	sec

Typical performance characteristic curves

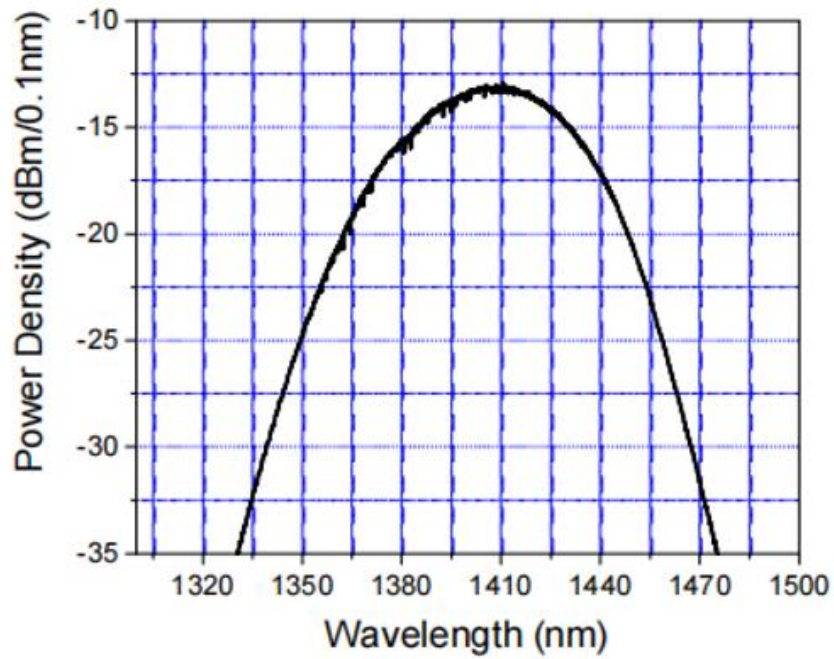
(Operating condition: $T_{SLED}=25^{\circ}C$).



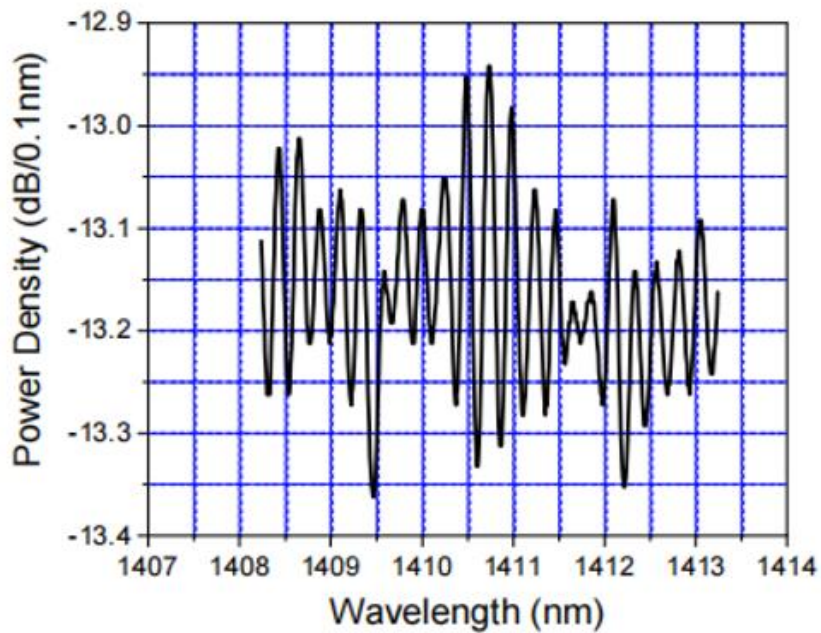
I-V Curve



P-I Curve



Spectrum



Spectral Modulation

BTF package

Parameters	Description
Package type	BTF
Fiber Optic:	SMF-28
MFD	10mm
Cladding diameter	125mm
Coating diameter	245mm
Protective sleeves	900mm loose tube
Pigtail length	1m
Fiber bending radius	>40mm
Connector type	FC/APC
Size information	See the figure below

Pin Assignment	
1	TEC+
2	THERMISTOR
3	-
4	-
5	THERMISTOR
6	-
7	-
8	-
9	-
10	SLED ANODE +
11	SLED CATHODE -
12	-
13	CASE
14	TEC -

